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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,511	02/23/2004	David Killian	2100.0060001	7601
26111	7590	07/14/2006	EXAMINER	
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			ART UNIT	PAPER NUMBER
			2173	

DATE MAILED: 07/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Remarks

1. Claims 1-30 have been examined and rejected. This is the first Office action on the merits.

Claim Rejections - 35 USC § 101

2. Claims 27-30 are rejected under 35 U.S.C. 101 because claim 27 is not limited to tangible embodiments. In view of Applicant's disclosure, specification [*paragraph 112, page 29*], the computer useable medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., [hard disk]) and intangible embodiments (e.g., [signals]). As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

To overcome this type of 101 rejection the claims need to be amended to include only the physical computer media and not a transmission media or other intangible or non-functional media.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. Claim 1 recites the limitation "a selected system component" in *[line 6]* of the claim. It is unclear whether the system component represents a single or multiple system components from the plurality of system components *[lines 1-2]* or the system components associated with said control objects *[lines 3-4]*.
- b. Claim 1 recites the limitation "a control object from said first set" in *[lines 6-7]* of the claim. It is unclear whether the control object represents a single or multiple control objects from the first set of control objects as recited in *[line 3]* of the claim.
- c. Claim 2 recites the limitation "a control object from said second set" in *[line 4]* of the claim. It is unclear whether the control object represents a single or multiple control objects from the second set of control objects as recited in *[line 2]* of the claim.
- d. Claim 2 recites the limitation "an affiliate system component" in *[line 5]* of the claim. It is unclear whether the affiliate system component represents a single or multiple affiliate system components as recited in *[lines 2-3]* of the claim.
- e. Claim 2 recites the limitation "the activated control object" in *[line 6]* of the claim. The activated control object could refer to the activation of a control

object from said first set [*claim 1, lines 6-7*] or the activation of a control object from said second set [*claim 2, line 4*].

- f. Claim 4 recites the limitation “a selected region” in [*line 3*] of the claim. It is unclear whether the selected region represents a single or multiple regions of the plurality of regions recited in [*line 2*] of claim 3.
- g. Claim 4 recites the limitation “a control object from said first set” in [*lines 3-4*] of the claim. It is unclear whether the control object represents a single or multiple control objects from the first set of control objects as recited on [*line 3*] of claim 1.
- h. Claim 4 recites the limitation “a control object from said second set” in [*line 5-6*] of the claim. It is unclear whether the control object represents a single or multiple control objects from the second set of control objects as recited on [*line 2*] of the claim.
- i. Claim 6 recites the limitation “a selected component type” in [*line 4*] of the claim. It is unclear whether the selected component type represents a single or multiple component types of the plurality of component types as recited in [*line 2*] of claim 5.
- j. Claim 6 recites the limitation “a control object from said first set” in [*lines 6-7*] of the claim. It is unclear whether the control object represents a single or multiple control objects from the first set of control objects as recited in [*line 3*] of claim 1.

- k. Claim 6 recites the limitation "a control object from said second set" in *[line 4]* of the claim. It is unclear whether the control object represents a single or multiple control objects from the second set of control objects as recited in *[line 2]* of the claim.
- l. Claims 7-10 recite the limitation "the on-off state" in *[line 3]* of claims 7-9 and *[line 7]* of claim 10. There is insufficient antecedent basis for this limitation in the claim.
- m. Claim 8 recites the limitation "a control object from said first set" in *[lines 4-5]* of the claim. It is unclear whether the control object represents a single or multiple control objects from the first set of control objects as recited in *[line 3]* of claim 1.
- n. Claim 9 recites the limitation "a control object from said first set" in *[line 5]* of the claim. It is unclear whether the control object represents a single or multiple control objects from the first set of control objects as recited in *[line 3]* of claim 1.
- o. Claim 13 recites the limitation "a system component" in *[line 6]* of the claim. It is unclear whether the system component represents a single or multiple system components as recited in *[line 4]* of the claim.
- p. Claim 13 recites the limitation "a control object from said first set" in *[line 7]* of the claim. It is unclear whether the control object represents a single or multiple control objects from the first set of control objects as recited in *[line 3]* of the claim.

- q. Claim 15 recites the limitation “a control object from said second set” in *[lines 3-4]* of the claim. It is unclear whether the control object represents a single or multiple control objects from the second set of control objects as recited in *[lines 2-3]* of claim 14.
- r. Claim 18 recites the limitation “a region” in *[line 2]* of the claim. It is unclear whether the region represents a single or multiple regions of the plurality as recited in *[line 2]* of claim 17.
- s. Claim 18 recites the limitation “a control object from said first set” in *[line 3]* of the claim. It is unclear whether the control object represents a single or multiple control objects from the first set of control objects as recited in *[line 3]* of claim 13.
- t. Claim 18 recites the limitation “the system component” in *[line 7]* of the claim. It is unclear whether the system component refers the one or more system components within the controlled environment *[line 4, claim 13]*, the selected system component *[line 6, claim 13]*, or the one or more system components included in each region *[lines 2-3, claim 17]*.
- u. Claim 18 recites the limitation “a control object from said second set” in *[lines 8]* of the claim. It is unclear whether the control object represents a single or multiple control objects from the second set of control objects as recited in *[lines 4-5]* of the claim.

- v. Claim 20 recites the limitation “a component type” in *[line 2]* of the claim. It is unclear whether the component type refers to a single or multiple component types of the plurality as recited in *[line 2]* of claim 19.
- w. Claim 20 recites the limitation “a selected component type” in *[line 6]* of the claim. It is unclear whether the component type refers to a single or multiple component types of the plurality as recited in *[line 2]* of claim 19.
- x. Claim 20 recites the limitation “the system component” in *[line 8]* of the claim. It is unclear whether the system component refers the one or more system components within the controlled environment *[line 4, claim 13]*, the selected system component *[line 6, claim 13]*, or the one or more system components included in each region *[lines 5-6, claim 20]*.
- y. Claims 21-24 recite the limitation “the on-off state” in *[lines 7-8]* of claims 21-23 and *[line 10-11]* of claim 24. There is insufficient antecedent basis for this limitation in the claim.
- z. Claim 27 recites the limitation “a system component” in *[lines 8-9]* of the claim. It is unclear whether the system component represents a single or multiple system components from the plurality of system components *[line 3]* or the system components associated with said control objects *[lines 6-7]*.
- aa. Claim 29 recites the limitation “a region” in *[lines 5-6]* of the claim. It is unclear whether the region represents a single or multiple regions of the plurality as recited in *[line 2]* of the claim.

- ab. Claim 29 recites the limitation “a control object from said second set” in *[line 12]* of the claim. It is unclear whether the control object represents a single or multiple control objects from the second set of control objects as recited in *[line 9]* of the claim.
- ac. Claim 30 recites the limitation “a component type” in *[lines 4-5]* of the claim. It is unclear whether the component type represents a single or multiple component types of the plurality as recited in *[line 2]* of the claim.
- ad. Claim 30 recites the limitation “a selected component type” in *[lines 9-10]* of the claim. It is unclear whether the component type represents a single or multiple component types of the plurality as recited in *[line 2]* of the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-5, 7-12, 13-19, 21-26, and 27-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Dresti et al (Pub. No. US 2003/0103088 A1).

Claims 1-5, 7-12 (Interface)

Claims 13-19, 21-26 (Method)

Claims 27-29 (Product)

6-1. Regarding claims 1, 13, and 27, Dresti teaches the claim comprising a first set of control objects, wherein said control objects are associated with system components within the controlled environment, by disclosing an electronic device having a remote control application user interface that functions to display operational mode information to a user *[paragraph 4, lines 1-4]*. A wheel 110 *[figure 11]* contains icons representing devices and/or activities *[paragraph 142, lines 1-3]*.

Dresti teaches a component control interface for presenting control options for a selected system component, wherein activation of a control object from said first set denotes said selected system component and populates the user interface with said control options, by disclosing that the icons function as soft keys that may be selected to cause the performance of a further action, for example, to display a device control page, cause the transmission of commands, etc. *[paragraph 138, lines 5-9]*.

Dresti teaches wherein each control option is associated with a sequence of commands that, when executed, sends instructions to control the operations or functions of said selected system component, by disclosing that users can select the devices by clicking on the appropriate icon in the wheel, wherein a page of control functions for that device would be displayed *[paragraph 151, lines 10-15; figure 19a]*.

6-2. Regarding claims 2, 14-16, and 28, Dresti teaches the claim further comprising a second set of control objects representing affiliate system components capable of providing an input to said selected system component, wherein activation of a control object from said second set populates the user interface with control options for an affiliate system component associated with the activated control object, wherein each control option for said affiliate system component is associated with a sequence of commands that, when executed, sends instructions to control the operations or functions of said affiliate system component, by disclosing that the home screen device wheel 110 may contain device and activity icons *[paragraph 142, lines 1-3]*. The activity icons represent the first set of control objects. When editing an activity icon, the user is presented with control objects in which to select the device to be operated. Selecting a device would then populate the interface with control options for that device. A series of keystrokes is then input, which would control the selected device when the activity icon is run *[paragraph 212, lines 9-14; paragraph 180, lines 6-24]*.

As per claim 16, Dresti teaches that when adding devices to the macro, a user links the device to the activity. When brought back to the home screen device wheel 110, the selected devices within the macro would not be displayed. Only the icon representing the activity would be shown *[figure 22G]*.

6-3. Regarding claims 3 and 17, Dresti teaches the claim wherein said first set of control objects represents a plurality of regions within the controlled environment, wherein each region includes one or more system components, by disclosing that the

first set of control objects may instead be a list of rooms as shown in *[figure 16a]*. Each room is associated with its own devices representing system components on home screen device wheel 110 *[figure 11]*. The device and activity icons are used to control the devices represented by each icon.

6-4. Regarding claims 4, 18, and 29, Dresti teaches the claim further comprising a second set of control objects representing available system components within a selected region, wherein activation of a control object from said first set denotes said selected region and populates the user interface with said second set, by disclosing device and activity icons on home screen device wheel 110 *[figure 11]*.

Dresti teaches wherein activation of a control object from said second set denotes said selected system component and populates the user interface with said control options, by disclosing that when a device icon is selected, a page of control functions for the device will be displayed *[paragraph 151, lines 10-15; figure 19a]*.

6-5. Regarding claims 5 and 19, Dresti teaches the claim wherein said first set of control objects represents a plurality of component types within the controlled environment, by disclosing that each device icon is associated with a type *[figure 14c]*.

6-6. Regarding claims 7 and 21, Dresti teaches the claim further comprising a switch object associated with a global command that, when executed, sends instructions to alter the on-off state of designated system components, wherein selection of one or

more control objects from said first set denotes said designated system components, by disclosing activity icons within wheel 110 that denote user generated macros. User generated macros allow the user to manually program a sequence of actions to be assigned to a single button such that the sequence can be repeated by a press of the single button *[paragraph 211]*.

6-7. Regarding claims 8 and 22, Dresti teaches the claim wherein said switch object is associated with a global command that, when executed, sends instructions to alter the on-off state of one or more system components matching a signaled component type, wherein selection of a control object from said first set denotes said designated component type, by disclosing a power macro for a home theatre system that offers a global on and off function for a home theatre *[paragraph 131]*.

6-8. Regarding claims 9 and 23, Dresti teaches the claim wherein said switch object is associated with a global command that, when executed, sends an instruction to alter the on-off state of at least one system component positioned within a designated region within the controlled environment, wherein selection of a control object from said first set denotes said designated region, by disclosing that users can set up macros for specific rooms *[paragraph 166]*.

6-9. Regarding claims 10 and 24, Dresti teaches the claim further comprising exclusion means for exempting from said global command at least one of one or more

specified system components, one or more system components matching a specified type, and one or more system components positioned within a specified region within the controlled environment, wherein execution of said global command does not send instructions to alter the on-off state of the exempted one or more system components, by disclosing that users can indicate which devices are to participate in the macro
[paragraph 166, lines 8-16].

6-10. Regarding claims 11 and 25, Dresti teaches the claim further comprising device definition means for specifying input or output links or dependencies among one or more affiliate system components and a primary system component, and thereby establishing a chain of system components including said primary system component and said one or more affiliate system components, wherein said primary system component is associated with a primary control object from said first set, by disclosing that when generating a macro, users can specify a sequence of actions for selected devices. For example, a "Watch DVD Movie" macro could be made with primary system component being the DVD Player. When selected via an activity icon on the home screen device wheel 110, the macro would 1) turn on the DVD Player; 2) turn the AMP to the DVD input; 3) turn on the TV; 4) set TV input to "Video 1"; and 5) play the movie
[paragraph 211].

6-11. Regarding claims 12 and 26, Dresti teaches the claim wherein activation of said primary control object populates the user interface with control options for executing

commands to send instructions to control the operations or functions of said chain of system components, by disclosing that users can copy, link, or edit the macros *[paragraph 213, lines 5-10]*. Editing the macros would display control options to allow the user to select and control devices when the macro is run.

7. Claims 1-6, 13-15, 17-20, and 27-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Hasha et al (U.S. Patent No. 6,734,879).

Claims 1-6 (Interface)

Claims 13-15, 17-20 (Method)

Claims 27-30 (Product)

7-1. Regarding claims 1, 13, and 27, Hasha teaches the claim comprising a first set of control objects, wherein said control objects are associated with system components within the controlled environment, by disclosing a method and system for generating a user interface for controlling software components through a user control point device *[column 2, lines 25-27]*. A main portion of a display contains menu items implemented as buttons for various components associated with the current space. The components relate to audio/video, lighting, climate control, elevator control, art control, and high resolution monitor control *[column 4, lines 49-55; figure 1]*.

Hasha teaches a component control interface for presenting control options for a selected system component, wherein activation of a control object from said first set denotes said selected system component and populates the user interface with said

control options, wherein each control option is associated with a sequence of commands that, when executed, sends instructions to control the operations or functions of said selected system component, by disclosing that when a user selects one of the buttons, the user interface for the corresponding software component is provided by a user interface component for that software component *[column 4, lines 55-58]*. *[Figure 2]* illustrates a display after the audio/video button has been selected. The main portion reflects options relating to controlling audio/video *[column 5, lines 5-8]*.

7-2. Regarding claims 2, 14, 15, and 28, Hasha teaches the claim further comprising a second set of control objects representing affiliate system components capable of providing an input to said selected system component, wherein activation of a control object from said second set populates the user interface with control options for an affiliate system component associated with the activated control object, wherein each control option for said affiliate system component is associated with a sequence of commands that, when executed, sends instructions to control the operations or functions of said affiliate system component, by disclosing, various program selector buttons for controlling various programs such as a movie, television channel, or music albums *[column 5, lines 10-13]*. *[Figure 3]* shows a display after the music album selector button has been selected. Various controls in the main portion allow the user to select an available album and to direct the music to a hardware component, such as the ambient audio component *[column 5, lines 20-27]*.

7-3. Regarding claims 3 and 17, Hasha teaches the claim wherein said first set of control objects represents a plurality of regions within the controlled environment, wherein each region includes one or more system components, by disclosing the control objects within the roam button, which allows users to specify a user interface for controlling another space *[column 5, lines 45-52; figure 6]*. The selectable spaces are each associated with components and control options for controlling operations or functions of the selected system component.

7-4. Regarding claims 4, 18, and 29, Hasha teaches the claim further comprising a second set of control objects representing available system components within a selected region, wherein activation of a control object from said first set denotes said selected region and populates the user interface with said second set, wherein activation of a control object from said second set denotes said selected system component and populates the user interface with said control options, by disclosing a main portion of a display that contains menu items implemented as buttons for various components associated with the selected space *[column 4, lines 49-51]*. *[Figure 1]* shows menu items associated with the swimming pool space.

7-5. Regarding claims 5 and 19, Hasha teaches the claim wherein said first set of control objects represents a plurality of component types within the controlled environment, by disclosing control types audio/video, lighting, climate control, elevator control, art control, and high resolution monitor control *[column 4, lines 51-55; figure 1]*.

7-6. Regarding claims 6, 20, and 30, Hasha teaches the claim further comprising a second set of control objects representing available regions within the controlled environment wherein each region includes one or more system components of a selected component type, by disclosing various control center buttons for controlling various control center components within the current space. A control center software component may correspond to an entertainment center, an ambient audio hardware component, or other hardware component within the space *[column 5, lines 13-18; figure 2]*.

Hasha teaches, wherein activation of a control object from said first set denotes said selected component type and populates the user interface with said second set, by disclosing that selecting control type audio/video in *[figure 1]* displays the user interface with the second set of control objects as shown in *[figure 2]*.

Hasha teaches wherein activation of a control object from said second set denotes said selected system component and populates the user interface with said control options, by disclosing *[figure 5]*, which shows the control options if ambient audio is selected.

Conclusion

8. The prior art made of record on attached form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R § 111(c) to consider these references fully when responding to this action. The

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documents cited therein teach similar systems for a user interface for multi-device control.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin H. Tan whose telephone number is 571-272-8595. The examiner can normally be reached on Mon-Thu 9:30-7 and alternating Fridays 9:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 571-272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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